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7(6/94

Sample Internet Server Product

Brewster Kahle with input from Harry Morris

Some major options:

License pieces to others License IR pieces from others Corporate information server Internet publishing platform for documents

Product description: Internet publishing platform for documents.

Platforms: Unix, Windows, CDROM Time till first ship: 12-18 months

Protocols: HTTP(WWW/Mosaic), Z39.50-v2 (client-server)

People: 3 to start, 7 by the end.

Eng mgr, 4 engineers, 1 documentation, 1 support, .5 marketing

Cost: \$1M for building 1.0. Marketing?

Cooperating companies: Intel, Apple, Sun, AOL

Competing companies: freeware, Mosaic Inc, InfoSeek,

NovX?, Oracle, Microsoft.

Distribution: freeware eval version,

\$1k-\$5k small server, licensed big version.

Features:

billing, security
modular for licensing and modification
Integrated CDROM/Online solution
Authoring
SGML integration

customers: 1994 1995 1996 1997 # customers: 30 100 700 2000 Revenue/cust(\$/yr): 20k 15k 5k

WAIS Revenue (\$): .7M 1.5M 3.5M 10M

Sample Internet Service

Some major options:

Be a service bureau for publishers

Go after sucessful CDROM db's to put data online

Go after sucessful Dialog db's to put them on the Internet

Go after catalog type sales to sell products

Construct a information service for businesses

Construct a information service for medicine

Construct a information service for law

Construct a information service for techies: MIS/sysadmins

Internet library system: bboards, email, ftp (basis of an AOL)

Product description: Information Service for Businesses

Platforms: Novell Windows, Lotus Notes, Mosaic, FAX

Time till first ship: 12-18 months

People: 4 to start, 9 by the end then large sales staff.

Publisher sales, Eng mgr, 3 engineers, 1 UI designer, 1 support, 1 sysadmin, 1 marketing.

Cost: \$1.5M for building. Tremendous cost to establish our name and reputation.

Cooperating publishers: DowJones, NYTimes, ...

Cooperating tech companies: Novell, Lotus, Mosaic Inc.

Competition: Dialog, Nexis, etc.; Reuters, AP, LATimes; new Inet co's

Sales strategy: telesales direct? var?

Features:

Comprehensive listings of: companies, products, people Alerts based on profiles. (human assisted?)

	1994	1995	1996	1997
Subscribers:	0	2k	10k	50k
Revenue/subscriber (\$/yr):	0	100	100	100
WAIS Revenue (\$):	0	.2M	1M	5M

Return-Path: <morris@wais.com>
Date: Tue, 28 Jun 94 13:54:24 PDT
From: Harry Morris <morris@wais.com>

Sender: morris@wais.com

To: scharf@netcom.com, brewster@wais.com, bruce@wais.com,

duhring@wais.com

Subject: development goals for 95

Here is a rough cut at development's goals for 95. Obviously this is raw.

I'd love feedback on how to make this better, what needs fleshing out,

what's missing, and how to integrate it with what others need.

Development Goals '95

- -shiop upgrades more frequently (9-12 months)
- -new level of support
- -idea of publishing tools needed (move toward full solution)
- -ability to respond to custom needs of users
- ✓ -IR presence & answer
 - -NT/windows presence? (incompatible w/publishing goal)
 - -understand/develop interface to sales (trips & shipping)
 - -documentation/training
 - -engineering manager
- \checkmark -simple client development tools & examples of going beyond HTTP $^{<}$
 - -testing/QA plans for products going out the door
 - -put in place infrastructure to grow
 - -learn how to hire & manage how to attract people & engage them
 - -put in place plans to grow research ability (possibly by farming out to

university/partners)

V possibly include on & product plan

Return-Path: <morris@wais.com>
Date: Tue, 28 Jun 94 13:15:13 PDT
From: Harry Morris <morris@wais.com>

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To: scharf@netcom.com, brewster@wais.com, bruce@wais.com,

duhring@wais.com

Subject: features for version 3

Here are some of the things we can do with version 3. These are mostly off $% \left(1\right) =\left(1\right) +\left(1\right)$

the top of my head, and generated before the planning meeting (ie. they

don't reflect any particuar market's needs).

goals:

best IR
fast
easy to use
flexible - it recognized my data right away
built for publishers - inc indexing, security, billing
agressive integration with heirarchical browsing/hypertext
good celints
pc friendly

possible directions for V3:

better IR (though hill climbing and moving score window)

do (noun phrases) of some sort (with EB?)

automatic document clustering (heirarchy and hypertext link building)

parse popular file formats for real (word, word perfect, frame maker,
lotus

123, notes?)

automatically figure out what parser to use (for streaming over a lan)

NT server

windows searcher (possibly server)

a server that learns from it's users

server for large scale data

real time incremental indexing

knowledge agents (watch what you do, talk to other agents)

RSA/Kerberose security

ablity to store meta information for a document (author/annotations/etc)

work with mosaic communications corp to build a first class client other client development/seeding?

parser which can be easily configured to recognize fields etc CD Rom optimization

server/indexer user interface?

HITML/ MITP

56mL

LINK CD-ROM to demo chert

WAIS, Inc. Plan 95 Corporate Mission

WAIS Inc. intends to dominate the market for tools and services for electronic publishing on wide area networks

Wais, Inc. Plan 95 Company Philosophy

Above and beyond the company's mission, there are reasons why we choose to work at WAIS-- things that turn us on about what we do and what we hope to accomplish-- the common thread that we share that helps keep the fire in the belly going!

WAIS is not about saving trees or replacing books. It is about a new type of literature coming from people unleashed from the constraints of traditional publishing; we believe anyone can be a publisher.

By providing the personal access and dissemination through hierarchal networks, we are breaking through traditional constraints for information—we are helping create a global, collective, distributed brain, a democracy of communities.

And..... we are helping people make money!

WAIS, Inc. Plan 95 Technology Strategy June 29, 1994

The technology strategy which guide WAIS Inc. development, partnering and licensing efforts over the next 3 years is as follows:

Use in-house publishing systems to help drive technology development by maintaining a representative base of publishing systems, e.g. news, corporate presence etc.

Provide turn-key publishing systems for customers to run.

Incorporate the following components in products used for both in-house and customer publishing systems

1. PROTOCOLS.

Protocols represent one of most important industry leadership and product differentiation capabilities. Hence, the top priority for our technology evolution is to maintain and expand the protocol expertise, both with Z39.50 and other significant protocols as they emerge.

Protocol modules will continue to be developed as a separate product which can be integrated with other search engines and servers and sold under royalty distribution agreements with partners.

We will drive the development and expansion of the Z39.50 protocol and will announce the WAIS, Inc. version of Z39.50 as a formal product announcement during FY95.

We will support other leading protocols such as HTTP by providing linkages through gateways with Z39.50 or by expanding WAIS, Inc. Z39.50 to incorporate the other protocols.

We will help proliferate Z39.50 by aggressively seeking partnering relationships with leading providers of client software.

2. SERVER COMPONENTS

- 2.1 Document database We will develop and maintain import capabilities for leading databases and will have at least one "recommended solution" database which we incorporate in our in-house and external publishing functions. To a limited extent, the basic server engine will include a limited database module for basic functions such as adding, deleting and changing records.
- 2.2 **Multiple platform support.** UNIX base systems will continue to be our primary platforms. We will pursue and encourage partnering and licensing relationships whereby the WAIS products are ported to Windows platforms and expanded to provide interfaces to CD-ROM electronic publishing.

- 2.3 **Document and Image Format Conversion**. Capabilities are currently limited but will be expanded through partnering and internal WAIS development projects to incorporate leading document and image formats such as Acrobat, MSWord, WordPerfect.
- 2.4 **Search Engine Evolution**. The WAIS, Inc. search engine will be evolved to provide more search features and capabilities such as----, faster searching, and multiple language capabilities (??). The evolution will be done by both incorporating enhancements from partnering and licensing deals as well as internal development.
- 2.5 Large Document Handling. SGML and other large document handling facilities will be added by partnering.
- 2.6 **Easy Data Importing**. The server will be enhanced to include an easy to use graphical user interface for system administrators to use in managing how data is imported to the UNIX versions of the WAIS server
- 2.7 **Authoring Tools**. Interfaces for leading electronic document creation tools will be developed.
- 2.8 Security. The RSA security modules will be incorporated into the WAIS Server.
- 2.9 **Reporting, Statistics and Billing**. The current reporting and statistics capabilities will be expanded and interfaced with one or more partnered billing system modules.

3. CLIENT COMPONENTS

WAIS Inc. will not be in the client software business but will pursue the development of "showcase clients" which demonstrate the advantages of the WAIS Z39.50 protocol and will also pursue proliferation of the WAIS protocol with leading developers of client software.

WAIS, Inc. Plan 95 Publishing Strategy June 29, 1994

WAIS, Inc.'s publishing function provides content delivery over networks by providing turnkey production services on WAIS, Inc. servers. The publishing strategy is as follows:

- 1. Look for content providers with name brand identity to provide revenue-sharing electronic publishing services for.
- 2. Provide dontent marketing will from name-brand recognition, the content provider's marketing efforts, and the product synergy offered on the WAIS, Inc. server.
- 3. Expand the WAIS, Inc. product line and publishing tools to incorporate the specific needs of content partners.
- 4. Expand the scope of WAIS, Inc. publishing tools by working with system integrators, publishing partners and WAIS, Inc. development.

WAIS, Inc. Plan 95 Partnering Strategy June 29, 1994

Partnering includes several types of relationships-- investment, joint ventures, co-marketing, bundling, product integration, co-distribution. WAIS, Inc. has or is pursing partnership arrangements with the following:

Hardware companies: Intel, Apple, Sun

Client vendors: Ensemble, Apple-Search, Mosaic

Vertical App companies: Helpdesk, libraries, CD ROM publishers

Search engines: Fulcrum, Conquest, PLS

System Integrators: KPMG, Andersen Consulting, PRC, RJO, NZ Publishers: DowJones, Encyclopedia Britannica, Scholastic, Westlaw

International: Fujitsu, EB Japan Network distributors: AOL

The WAIS, Inc. partnering strategy is to concentrate on partnering relationships which offer the following:

- 1. Enhancements to the technology base. Partners who can provide WAIS Inc. access to technology components which expand or improve the ability of WAIS, Inc. to deliver complete, turnkey Electronic Publishing Systems. Access for WAIS, Inc. can be via licensing the partner's technology, rights to technology based upon joint development efforts, VAR arrangements, Systems Integrator capabilities, etc.
- 2. **Expansion of distribution capabilities.** Partners who have large-scale distribution potential, access to foreign markets, access to domestic niche markets, or significant turnkey installation or VAR capabilities are examples of desirable partners.
- 3. **Defacto standard potential**. Companies who are so well known in a publishing category, have a very large installed customer base, or are pursuing a clearly leading edge implementation of electronic publishing are examples of potential partners who can offer WAIS, Inc. almost instant acceptance as the industry leader in a particular facet of the electronic publishing industry.

WAIS, Inc. Plan 95 Corporate Objectives

July 5, 1994

1. Evolve the technology to insure that it is current, complete and provides the basis for dominating the Wide Area Network Publishing Industry as measured by:

PROTOCOLS

- 1.1 Publishing a Protocol Proliferation Plan by July 15, 1994
- 1.2 Publishing a Protocol Design document by August 15, 1994 which addresses how alternative protocols can be integrated or replaced
- 1.3 Submitting a WAIS Z39.50 standard proposal to the Z39.50 standards committee by September 15, 1994
- 1.4 Signing protocol licensing deals which provide WAIS, Inc. with royalty or per unit revenue --

Q1 95 2

Q2 95 2

Q3 95 3

Q4 95 3

1.5 Releasing version two of the Z39.50 protocol by December 31, 1994

PRODUCTION SERVICES

- 1.6 Publishing a design for a complete "turnkey" wide area network publishing system by July 30, 1994. The design should identify missing components and procedures.
- 1.7 Having in-house and smoothly operational at least two publishing service bureau operations by November 1, 1994.
- 1.8 Announcing a complete, scalable turnkey publishing capability by September 1, 1995
- 1.9 Signing and bringing on line new production services deals

	<u>Sign</u>	On-Line
Q1 95	1	
Q2 95	2	
Q3 95	4	1
Q4 95	5	2

CLIENT TECHNOLOGY

- 1.10 Identifying by July 15, 1994, five of the top client development companies to target as marketing, co-development and demonstration partners and having signed letter of intent partnership arrangements with at least three by August 1, 1994.
- 1.11 Developing and having available to market a client tool-kit by September 1, 1994.
- 1.12 Developing or partnering a Client prototype by December 15, 1994 which demonstrates the advantages of the WAIS Z39.50 protocol
- 1.13 Having a client development partner ship a new client program which incorporated the WAIS Z39.50 protocol by June 30, 1995

SERVER TECHNOLOGY

1.14 Having available for shipment the next release of the WAIS server by.....

2. Achieving 1995 revenue goals as measured by quarterly revenues (1,000's)of:

	<u>Products</u>	<u>Services</u>	<u>Total</u>
Q1 95	\$		\$500
Q2 95			\$700
Q3 95			\$800
Q4 95			<u>\$1,000</u>
totals			\$3,000

- 3. Establish a distribution process for products and services which provides WAIS access to key national and international markets as measured by:
 - 3.1 Telemarketing
 - 3.2 Outside distributors
 - **3.3 VARS**
 - 3.4 International Resellers
 - 3.5 Protocol licensing
 - 3.6 Government applications
 - 3.7 Services marketing tools (define the product, define the implementation process and define the operating process)
 - 3.8 Sales process and channel identification for services
- 4. Implement a partnering program which insures focus on appropriate partners as defined by the Partnering Strategy document as measured by:
 - 4.1 Signing distribution agreements by December 31, 1994 with international partners who can offer access to the largest Asian and four largest European markets.
 - 4.2 Obataining a commitment from at least two significant systems integrators by October 31, 1994 to make the WAIS, Inc. technology a significant component of their electronic publishing integration strategy.
- 4. Put in place the organizational structure which can take the company through the next two years of rapid growth as measured by:
 - 4.1 Hiring a VP/Director of Development by
 - 4.2 Hiring a COO by